This course supports the assessments for Operating Systems II. The course covers 4 competencies and represents 4 competency units.

Introduction

Overview
This course is for current and aspiring information technology professionals. It will help you master installation, configuration, and troubleshooting for one of the world's leading open source operating systems: Linux.

Linux is widely used in different industries for all kinds of functions including web servers, firewalls, and graphic design, and provides robust functionality and a stable, secure environment that is not often found in any other client operating system. Mastering this operating system will help you become an expert in information technology and a savvy user.

Successfully passing the Linux + Part 2 LX0-104 will earn you the second half of the Linux + certification from CompTIA. This certification will help bring you into the IT industry and will help increase your value as a current IT industry professional.

Recommended Experience: Passed Linux+ Part 1 LX0-103, A+, Network+ and at least 12 months of Linux administration experience.

Your primary learning resource for this course will be uCertify. The content of this learning resource is based on the following Sybex publication by Christine Bresnahan and Richard Blum (authors).


Watch the following video for an introduction to this course:

Note: To download this video, right-click the following link and choose "Save as...": download video.

Launch Course

Competencies
This course provides guidance to help you demonstrate the following 4 competencies:

- **Competency 442.2.1: System Performance and Reliability**
  The graduate can monitor and optimize system performance and reliability.
- **Competency 442.2.2: Desktop Environment**
The graduate can configure and troubleshoot the desktop environment.

- **Competency 442.2.3: Network Protocols and Services**
  The graduate can implement, manage, and troubleshoot network protocols and services.

- **Competency 442.2.4: System Security**
  The graduate can configure, manage, and troubleshoot security.

**Course Mentor Assistance**

As you prepare to successfully demonstrate competency in this subject, remember that course mentors stand ready to help you reach your educational goals. As subject matter experts, mentors enjoy and take pride in helping students become reflective learners, problem solvers, and critical thinkers. Course mentors are excited to hear from you and eager to work with you.

Successful students report that working with a course mentor is the key to their success. Course mentors are able to share tips on approaches, tools, and skills that can help you apply the content you're studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency. Even if things don’t work out on your first try, course mentors act as a support system to guide you through the revision process. You should expect to work with course mentors for the duration of your coursework, so you are welcome to contact them as soon as you begin. Course mentors are fully committed to your success!

**Getting Started**

Before you start on this course you should assess your knowledge on this topic by taking the uCertify Pre-Assessment. Even if you get many questions wrong the results will help you understand what you need to learn and what areas you should concentrate on.

The test consists of 60 items and you have 90 minutes for completion.

If you believe you have previous knowledge of most or all topics covered in this course, start by taking the uCertify Post-Assessment before you begin and use its results to focus your studies. To confirm mastery, your score should be at least 90% and be taken in “Test Mode.” The test consists of 60 items and you have 90 minutes for completion.

Your course mentors can help you develop a study plan based on your results.

The pacing guide suggests a weekly structure to pace your completion of learning activities. It is provided as a suggestion and does not represent a mandatory schedule. Follow the pacing guide carefully to complete the course in the suggested timeframe.
The uCertify modules in your pacing guide are constructed in a manner to build off previous lessons, so make sure to complete each section in order. Each module has

- videos
- lecture/exam essentials
- labs and quizzes
- review questions
- flash cards
- exercises/simulations

It is essential to read the materials prior to attempting the simulations to ensure you have a full and applicable understanding of the concepts and competencies required for successful completion of the practice exams.

**Pacing Guide for Operating Systems II**

<table>
<thead>
<tr>
<th>Week</th>
<th>Resource and Activity</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Take the Preassessment</td>
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<tr>
<td></td>
<td>Ensure Debian installation inside Virtual Box from Operating Systems I is up and running for hands-on exercises and experimentation</td>
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<td></td>
<td>Complete Lesson 1 (Configuring the X Window System, Localization, and Printing) sections 1.1 – 1.7</td>
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<tr>
<td>Week 2</td>
<td>Finish Lesson 1 (Configuring the X Window System, Localization, and Printing), sections 1.8 – 1.10 including the Quiz, the Exercise, and the labs</td>
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<td>Complete Lesson 2 (Administering the System), sections 2.1 – 2.4</td>
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<tr>
<td>Week 3</td>
<td>Finish Lesson 2 (Administering the System), sections 2.5 – 2.8 including the Quiz, the Exercise, and the labs</td>
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<td>Week 4</td>
<td>Complete Lesson 3 (Configuring Basic Networking) sections 3.1 – 3.4</td>
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<td>Week 4</td>
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<tr>
<td></td>
<td>Finish Lesson 3 (Configuring Basic Networking) sections 3.5 – 3.7 including the Quiz, the Exercise, and the labs</td>
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<td></td>
<td>Complete Lesson 4 (Writing Scripts, Configuring Email, and Using Databases) sections 4.1 – 4.4</td>
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<td>Week 5</td>
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<tr>
<td></td>
<td>Finish Lesson 4 (Writing Scripts, Configuring Email, and Using Databases) sections 4.5-4.7 including the Quiz, the Exercise, and the labs</td>
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<td>Complete Lesson 5 (Securing Your System) sections 5.1 – 5.4</td>
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<td>Week 6</td>
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<td></td>
<td>Finish Lesson 5 (Securing Your System) 5.5 – 5.7 including the Quiz, the Exercise, and the labs</td>
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<td>Week 7</td>
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<td>Complete Practice Tests A and B in Test Mode</td>
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<td></td>
<td>Complete Post Assessment in Test Mode</td>
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<td></td>
<td>Week 8</td>
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<td>Request Voucher; Schedule Exam</td>
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</table>

**It is recommended** that students install a virtual Linux environment for the hands-on exercises in this course.

We suggest that students install the latest version of Debian to practice dpkg, yast/yum, and apt-get commands and the latest version of CentOS to cover RPM inside the Virtual Box system.

Please familiarize yourself with the following additional resources, for this course.

**CompTIA Candidate Agreement**
If you decide to use other learning resources, particularly those found online, **make certain that none qualify as a brain-dump. Using them can result in academic sanctions and loss of**
your certification.

Please read the full CompTIA Candidate Agreement.

**Final Assessment Tips**

One of the many things that makes WGU unique is its **competency-based education model**. If you know the material, all you have to do is prove it by passing the exam. If you can do this, you can accelerate the receipt of your degree.

To make sure you have the best chance possible to pass the exam on your first attempt, the following steps should be completed successfully before you take it:

- Go through the course in its entirety. Mark as complete as you progress.
- Pass all of the Lesson quizzes at the end of each Lesson as well as all of the Exercises and Performance Labs.
- Pass the Post-Assessment and both Practice Tests with 90% or higher.
- Spend at least four weeks studying.
- Spend at least 20 hours practicing on a Linux system (Debian running in Virtual Box is recommended).

If you have completed the steps above and you feel comfortable with all of the concepts presented, you are most likely ready to attempt the exam.

If you fail your first attempt, you will be required to contact the course mentor to see what went wrong and how you can prepare to ensure a successful second attempt. After determining you are ready, your course mentor will approve your request once to make another exam attempt.

**Outside Vendor Assessment Information to complete the CompTIA Linux + LX0-103 exam.**

For directions on how to receive access to outside vendor assessments, see the “Accessing Objective and Outside Vendor Assessments” page.

**Submitting Outside Vendor Assessment Scores**

After completing an outside vendor assessment, follow the directions for submitting a score report on the “Following Outside Vendor Assessments” page.

**Please Note**

**Earn Linux+, powered by LPI, and receive 3 industry-recognized certifications**
By completing the CompTIA Linux+ powered by LPI certification, you can also automatically receive the LPI LPIC-1 and the SUSE Certified Linux Administrator (CLA) certifications. Earn three industry-recognized certifications for the cost, time, and effort of one!

How:

Obtain an LPI ID.

Once you have passed both Linux+ exams, log into your CompTIA certification account, choose ‘Demographics’, then ‘Settings’. On the Settings page check the box to have your information forwarded to LPI, then click Submit

Upon receipt of your LPIC-1 apply online for your SUSE CLA.

Please note that the "3-in-1" process is not reciprocal (i.e.. you can't do it the other way round) and is not available in Japan.

Let your Course Mentor now if you have any questions.

Feedback

WGU values your input! If you have comments, concerns, or suggestions for improvement of this course, please submit your feedback using the following form:

[Course Feedback]

Accessibility Policy

Western Governors University recognizes and fulfills its obligations under the Americans with Disabilities Act of 1990 (ADA), the Rehabilitation Act of 1973 and similar state laws. Western Governors University is committed to provide reasonable accommodation(s) to qualified disabled learners in University programs and activities as is required by applicable law(s). The Office of Student Accessibility Services serves as the principal point of contact for students seeking accommodations and can be contacted at ADASupport@wgu.edu. Further information on WGU's Accessibility policy and process can be viewed in the student handbook at the following link:

[Policies and Procedures for Students with Disabilities]